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Commissioner

August 7, 2018

To: Radiation Safety Officer

Reference: Assembler advisory regarding 25 Texas Administrative Code §289.232(i)(7)(B)

The agency has seen an increase in service providers indicating, on Equipment Performance Evaluation (EPE) reports, that panoramic machines, cephalometric, and Cone Beam CT (CBCT) machines are fully digital, and have meet the collimation requirements according to manufacturer specifications, without providing records of the actual test results.

According to 25 TAC §289.232(i)(7)(A) the registrant shall cause to be performed tests necessary to assure proper function of equipment with the indicated standard for each item specified in paragraph (6)(H-M).

Paragraph (i)(6)(L) regarding collimation states: Field limitation shall meet the requirements of paragraphs (11) and (12) of this subsection.

Specifically, paragraph (12) states: Additional requirements for dental extraoral systems.

- (A) Field limitation. Dental rotational panoramic systems shall be provided with means to restrict the x-ray beam to the following:
 - (i) the imaging slit in the transverse axis; and
 - (ii) no more than a total of 0.5 inches larger than the imaging slit in the vertical axis.
- (B) All other dental extraoral radiographic systems (e.g., cephalometric) shall be provided with means to restrict the x-ray field to the image receptor. The x-ray field shall not exceed the image receptor by more than:
 - (i) 2.0% of the source-to-image receptor distance for the length or width of the image receptor for rectangular collimation; or
 - (ii) 2.0% of the source-to-image receptor distance for the diagonal of the image receptor for circular or polygon collimation.

Further, 25 TAC §289.232(i)(7)(B) regarding EPE results states:

(B) Records of the test results, including any *numerical readings* shall be maintained by the registrant in accordance with subsection (k)(1)(X)(i) of this section.

[Addressee]
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The agency acknowledges that the previous EPE example templates provided, and the templates presently used by most service providers, do not specifically address Image Receptor, Detector, Field of View (FOV), Diaphragm, or Active Sensor sizes for Digital Panoramic, Cephalometric, or CBCT machines, but the requirements of 25 TAC §289.232(i)(11-12) still apply.

Confirmation of compliance under this regulation must be provided to the facility. If the records of the test results are presented in any manner other than calculated numerical data, it is the responsibility of the service provider to facilitate presentation of these results within the EPE by printout, pictorial reference, or any other manner that can be reviewed, and confirmed by the facility and the agency. If you are unsure of how to test the collimation of a particular machine, you should refer to the technical specifications of that machine, or contact to the manufacturer for guidance.

As a courtesy, an updated Dental EPE Example form (EPEDent-1) has been uploaded to our website, www.dshs.texas.gov/radiation, under the forms section. If you have any questions concerning this matter, please contact us.

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